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basic imagery interpretation report

Ivankovskiy Guided Missile Plant (S)

STRATEGIC WEAPONS INDUSTRIAL FACILITIES

USSR



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MARCH 1982

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INSTALLATION OR ACTIVITY NAME					COUNTRY
Ivankovskiy Guided Missile Plant					UR
UTM COORDINATES	GEOGRAPHIC COORDINATES	CATEGORY	BE NO.	COMIREX NO.	NIETB NO.
NA	56-45-21N 037-07-00E				
MAP REFERENCE					
ACIC. USATC, Series 200, Sheet 0154-22, scale 1:200,000					
LATEST IMAGERY USED			NEGATION DATE (If required)		
			NA		

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ABSTRACT

1. (S/D) This report describes activity at the Ivankovskiy Guided Missile Plant, USSR, from August 1978 through November 1981 and updates the previous NPIC report on this facility, [REDACTED]. This report is based on all relevant satellite imagery acquired through the information cutoff date of [REDACTED]. A line drawing showing the layout of the facility, six annotated photographs, and three tables are included.

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2. (S/D) A new developmental area was under construction in the southwestern section of the plant during the reporting period. The engine/propulsion test cell was in the late stages of a major modification program. Evidence of continuing and new production of air-to-surface missiles (ASMs) included the presence of AS-4, AS-9, and ASM shipping crates of various sizes. Ivankovskiy was probably involved in the development of a new long-range strategic air-launched cruise missile (ALCM) and/or the SS-NX-22 naval cruise missile during the reporting period.

INTRODUCTION

3. (TSU) [REDACTED] The Berezhnyak design bureau (KB) is at the Ivankovskiy Guided Missile Plant (Figures 1 and 2 and Table 1). The plant served as the KB's pilot plant for preflight testing, the production plant for flight testing, and the series production plant for some of the KB's programs.¹ The Berezhnyak KB is the only identified Soviet design authority for ASMs. It was also involved in the design of naval surface-to-surface cruise missiles (SSCMs) that were based on ASM designs. The KB is probably involved in the development and production of a variety of tactical ASMs (TASMs) and a strategic ALCM. The Berezhnyak KB may also be involved with the Mikoyan KB in the design of a reusable space system (RSS).²

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BASIC DESCRIPTION**Construction**

4. (S/D) The construction of a developmental area (Figure 3), which began in 1976, was nearly complete in 1981. The new area is in the southwest corner of the plant and consists of engineering and testing floorspace. A new-style possible test building (item 127, Figure 3 and Table 1) was externally complete by early 1980. During the early stages of construction, the building was partitioned into three bays or sections. Poured concrete or concrete blocks, rather than standard prefabricated building sections, were used during construction. The thickness and sturdy construction of the walls indicate the possibility of the building being used for hazardous operations (i.e., laboratory tests or component tests). The eastern possible test section (item 127a) of the building is 18 by 4 by 11 meters. A high-bay section (item 127b) along the western side of the building has three possible air intakes/ventilators or skylights. A rectangular tower/stack (item 126) was constructed east of the possible test building. Its configuration and alignment resemble those of an exhaust silencer/diffuser for an engine/propulsion test position. There is no physical connection between the possible test building and the rectangular tower/stack. If the building and tower/stack were to function as a test position, an exhaust duct connecting the two would be necessary. On imagery of [REDACTED] (Figure 4), a partially covered, L-shaped excavation extending from the rectangular tower/stack toward (but not connecting with) the possible test building was observed. An excavation observed in 1978 on the east side of the possible test building may have accommodated the installation of conduits or pipes that could have been connected to the L-shaped excavation observed in October 1981.

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5. (S/D) East of the tower/stack, a possible engineering and test building (item 125, Figure 3 and Table 1) was in the late stages of construction by the end of the reporting period. The northern half of the building consists of a three-story administration/engineering section (item 125a), and the southern half of the building will possibly function as a test section (item 125b). A 2-meter-square and 16-meter-high section (item 125c) of the building is adjacent to the west side of the possible test section. Item 125c may be linked to an underground conduit that extends from the northern side of item 125, curves westward,

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then extends southward along the western side of the building. Item 125c is aligned with items 126 and 127, but the underground conduit and its relative proximity to the main sections of item 125 probably link item 125c to the activities of item 125.

6. (S/D) Along the eastern side of item 125 are foundations and bases for seven spherical tanks (Figure 3). Four bases were constructed between late 1980 and early 1981. Hexagonal construction forms for three additional bases were constructed between May and October 1981 (Figure 4). Six gore sections and two possible polar caps for spherical tanks were on the ground adjacent to the row of four completed tank bases on [redacted]. Each gore section is 2 meters wide at the midpoint, tapering to 1 meter at each end. The gore sections probably arrived at Ivankovskiy Transshipment Facility [redacted] (Figure 5) between October 1979 and June 1980. No spherical tanks or pipe galleries were under construction during the reporting period. 25X1 25X1

7. (S/D) Two additional structures, items 117 and 118, are also part of the new developmental area. Item 117 consists of a two-story administration/engineering annex (item 117a) and two identical high-bay engineer/test sections (items 117b and c). Each engineer/test section has a single [redacted] meter-high access door. The function of item 118 has not been determined because the building is in the early stage of construction. On imagery of [redacted] the building appeared to contain a possible open central work section with shops or work bays along two sides. 25X1 25X1

8. (S/D) Several other construction projects were underway within the plant during the reporting period. Major modifications to the engine/propulsion test building (item 90, Figure 2 and Table 1), began in the summer of 1978. The blast apron and blast deflector were removed and a 6-meter-square by 23-meter-high exhaust silencer/diffuser (item 90d) and an exhaust duct (item 90c) 16 meters long and [redacted] meters in diameter were installed. The exhaust duct is enclosed in a structure with beveled sides. The beveled structure probably aids in heat transfer and noise reduction. In addition, the floorspace of the test building was increased by nearly 40 percent. A 13- by 6- by 6-meter air intake was constructed on the roof of the old portion of the test building. By [redacted] roof over the new portions of the test building was nearly complete (Figure 6). When the modifications are complete, the test building will accommodate a wide range of air-breathing engines. 25X1 25X1

9. (S/D) Several smaller buildings were either constructed or expanded during the reporting period. A fabrication/assembly building (item 102, Figure 2 and Table 1) underwent internal fitting out in 1981, and will probably be operational by mid-1982. An engineering/shop building (item 104) was constructed north of the new developmental area, near item 102. A graded area east of a shop building (item 110) represents preparations for a new building or storage area.

10. (S/D) The wide range in types of construction observed at the plant may be related to a number of future programs. The Bereznyak KB is probably involved in the design of an RSS. Some of the facilities constructed in the new developmental area may be for work on components of an RSS. Spherical tanks like those under construction at Ivankovskiy have been constructed at a few aircraft development facilities and at facilities involved in Soviet space-related development programs and propellant research and development. The large-diameter exhaust duct and the large exhaust silencer/diffuser at the modified engine/propulsion test building would be appropriate for engine or propulsion testing for either an RSS or an ASM.

Production

11. (S/D) Series production of both the AS-4 and AS-9 ASMs continue at Ivankovskiy. Between 1978 and 1981, the number of AS-4 shipping crates fluctuated (Table 2). Since a high count in 1980 of 55 on [redacted] the number of shipping crates has dropped significantly. The continued low counts of crates suggest a decline in AS-4 production at Ivankovskiy, although maintenance of a high production level would be needed to support the conversion of TU-95 (Bear B and C) bomber aircraft from AS-3 to AS-4 carrier aircraft. Some of the AS-4 production may have been transferred to another Bereznyak production facility or production at Ivankovskiy may have remained the same; the decrease in numbers of shipping containers would then indicate a change in shipping techniques (i.e., increased shipment at night). Changes in the total number of AS-9 shipping crates have also been observed. The number of AS-9A shipping crates has steadily decreased since May 1977, while the number of AS-9B shipping containers has steadily increased. 25X1 25X1

12. (S/D) Between December 1980 and March 1981, an AS-3 airframe (inset, Figure 7) was placed in the open storage yard in the northeast corner of the plant. By [redacted] the airframe had been removed. The reason for the presence of the AS-3 airframe at Ivankovskiy is not known. The airframe may have been at the plant for one of the following reasons: 25X1

- as an early prototype or mockup related to possible involvement of the Bereznyak KB in the AS-3 program;
- in relation to the conversion of BEAR B and C weaponry from the AS-3 to the AS-4;
- for unidentified testing;
- as part of a static display at the plant.

The AS-3 was probably designed by the Mikoyan KB in the late 1950s or early 1960s. Neither the Bereznyak KB nor the Ivankovskiy plant is known to have been involved with any aspect of AS-3 design, development, or production.

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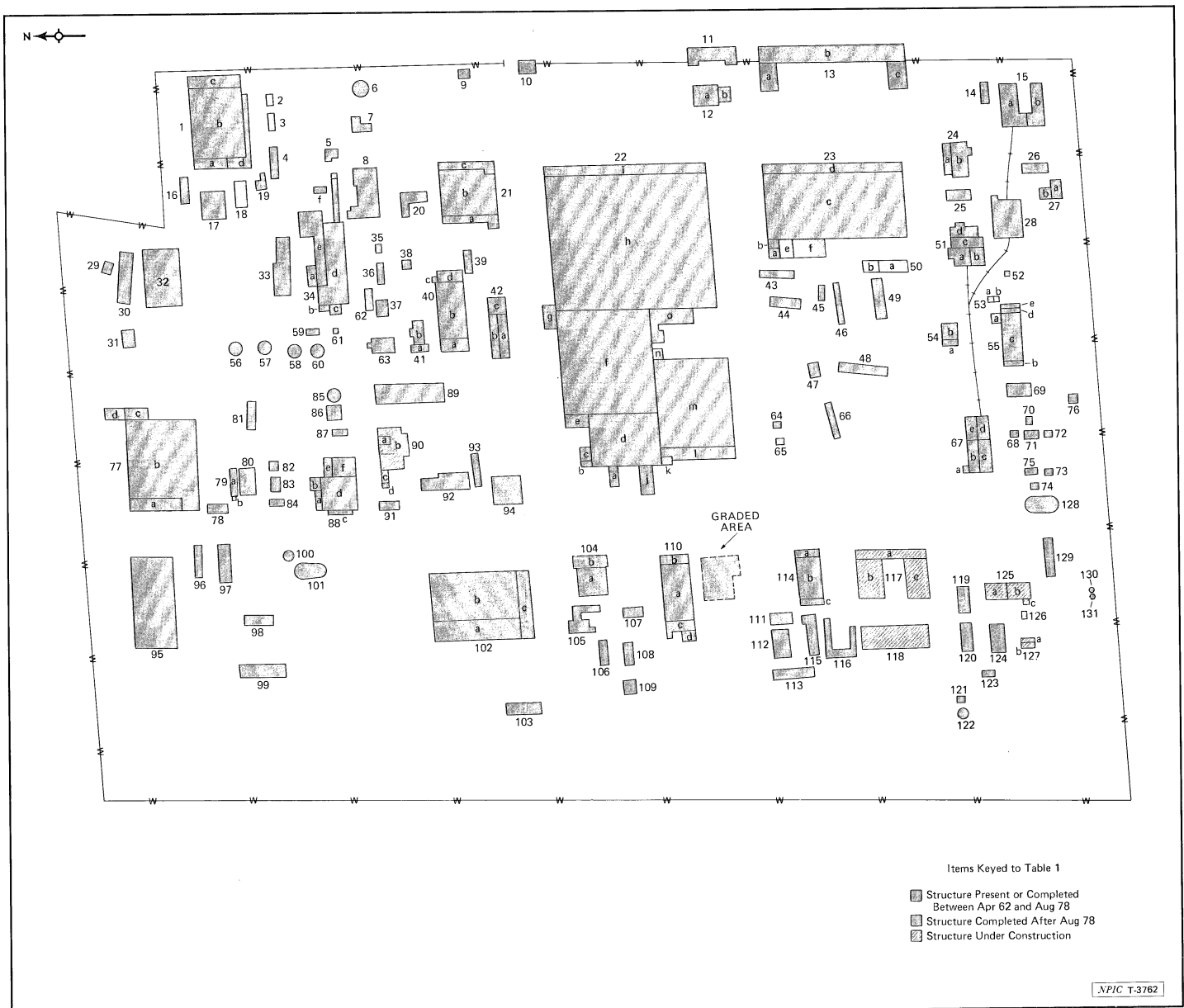


FIGURE 2. LAYOUT OF IVANKOVSKIY GUIDED MISSILE PLANT

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Table 1.
Buildings and Structures at Ivankovskiy Guided Missile Plant, USSR, as of [redacted]
(Items keyed to Figures 2 and 3)

This table is in its entirety classified (SECRET//NOINTL)

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Item	Function	Dimensions (m)			Floorspace (sq m)	Externally Complete	Remarks	Item	Function	Dimensions (m)			Floorspace (sq m)	Externally Complete	Remarks	Item	Function	Dimensions (m)			Floorspace (sq m)	Externally Complete	Remarks
		L	W	H						L	W	H						L	W	H			
1	Shop				5,378	Sep 70		37	Support bldg	19	12	5	228	Sep 76		82	Storage bldg	7	6	7	42	Aug 71	
a	Sec	38	8	8	304			38	Support bldg	6	5	4	30	Feb 66		83	Support bldg	14	5	3	70	Sep 76	
b	Sec	76	53	10	4,028			39	Support bldg	24	10	3	240	Jun 64		84	Support bldg	14	6	3	84	Aug 71	
c	Sec	53	14	14	742			40	Shop	28	12	7	2,593	Apr 62		85	Storage tank	12 (diam)				Apr 62	
d	Sec	76	4	5	304			a	Sec	19	12	7	348			86	Lab/workshop	19	14	5	268	Apr 62	
2	Storage bldg	14	7	3	98	Jun 80		b	Sec	80	29	15	1,740			87	Support bldg	14	5	3	70	Aug 71	
3	Storage bldg	20	7	3	140	Jun 80		c	Sec	12	12	3	144			88	Shop				2,462		
4	Storage bldg	36	5	3	180	Aug 71		d	Sec	19	19	7	361			a	Sec	23	12	6	276	Jun 66	
5	Support bldg	13 (diam)			41	Aug 42		41	Post lab/workshop				440	Apr 62		b	Sec	14	12	11	168	Jun 66	
6	Storage tank	19	19	5	418	Apr 62		a	Sec	19	8	5	152			c	Sec	24	3	8	72	Jun 66	
7	Support bldg	22	19	5	418	Apr 62		b	Sec	24	12	12	288			d	Sec	38	37	13	1,406	Apr 62	
8	Support bldg	52	25	5	1,300	Aug 71		42	Shop	41	9	8	1,876	Apr 62		e	Sec	18	10	8	180	Dec 64	
9	Support bldg	8	8	3	64	Apr 62		a	Sec	41	10	6	410			f	Sec	20	18	10	360	Dec 64	
10	Security bldg	19	11	4	209	Apr 62		b	Sec	41	17	6	697			89	Admin/engr bldg	76	17	12	1,292	Sep 63	
11	Security bldg	49	17	10	833	Sep 63		c	Sec	41	17	6	697			90	Engine/proulsion test bldg	14	9	6	112	Oct 61	
12	Admin bldg	29	24	5	816	Feb 75		43	Storage bldg	34	8	3	272	Aug 62		a	Test sec	48	24	13	1,152		
a	Sec	12	10	3	120			44	Storage bldg	23	11	3	253	Aug 71		b	Test duct	16	5.1 (diam)				
13	Admin/engr bldg				13,638	Jul 68		45	Storage bldg	14	4	3	56	Jun 67		c	Exhaust duct	30	10	4	300	Mar 72	
a	Sec	30	18	13	1,620		3 stories	46	Storage bldg	52	5	3	58	Jun 67		d	Exhaust silencer/diffuser	6	6	23			
b	Sec	151	19	19	11,476	May 66	4 stories	47	Storage bldg	14	10	3	140	Aug 62		91	Support bldg	19	10	5	190	Aug 71	
c	Sec	30	18	13	1,620			48	Storage bldg	53	12	3	836	Apr 62		92	Storage bldg	52	18	4	936	Apr 62	
14	Storage bldg	25	8	7	200	May 77		49	Storage bldg	68	13	3	858	Jun 64		93	Storage bldg	36	4	3	144	Jun 64	
15	Carpentry shop bldg				2,244			50	Storage bldg				705			94	Support bldg	31	30	8	930	Oct 61	
a	Sec	48	18	4	664	Aug 71		a	Sec	30	15	4	450	Aug 79		95	Shop	97	42	5	4,074	Aug 75	
b	Sec	46	30	4	1,380	Jun 42		b	Sec	17	15	7	255	Jun 80		96	Storage bldg	30	10	4	300	Mar 72	
16	Storage bldg	29	8	3	232	May 66		51	Carpentry shop				1,386			97	Storage bldg	40	13	4	520	Oct 64	
17	Shop	30	23	8	690	May 66		a	Sec	23	18	5	414	Feb 64		98	Support bldg	30	12	5	360	Aug 75	
18	Support bldg	31	12	5	372	Oct 78		b	Sec	18	16	4	288	Feb 64		99	Storage bldg	48	12	7	576	Mar 61	
19	Support bldg	16	10	3	160	Aug 71		c	Sec	22	12	4	384	Feb 64		100	Storage bldg	33	14	7	462	May 79	
20	Post lab/workshop	29	26	5	744	Apr 62		d	Sec	25	12	6	300	Sep 70		101	Storage bldg						
21	Forge/foundry bldg				3,944			52	Support bldg	7	4	4	28	Sep 78		102	Fab/assem bldg	96	24	11	8,208	Jun 80	
a	Sec	58	3	8	174	Apr 62		53	Support bldg	7	3	6	21	Jun 80		a	Sec	96	24	11	2,304		
b	Sec	58	52	10	3,016	Jul 70		b	Sec	7	3	3	49			b	Sec	96	52	11	4,992		
c	Sec	58	13	13	754	Jun 72		c	Sec	7	7	10	21	Jun 80		c	Sec	12	16	12	912		
22	Fab/assem bldg				55,958			54	Admin/engr bldg				380			103	Admin/engr bldg	37	13	14	1,481	Aug 77	
a	Sec	15	12	5	180	Apr 62		a	Sec	14	7	5	98	Aug 75		104	Engr/ship bldg	32	31	9	992	Jul 80	
b	Sec	9	8	13	54	Apr 62		b	Sec	18	14	7	252			a	Sec	38	14	8	532		
c	Sec	16	9	9	144	Apr 62		55	Carpentry shop				1,474			b	Engr/ship bldg	32	31	9	992		
d	Sec	72	54	22	3,898	Apr 62		a	Sec	16	9	3	144	Jun 74		105	Storage bldg		Irregular				
e	Sec	19	11	3	209	Apr 62		b	Sec	19	6	7	114	May 69		106	Storage bldg	30	9	4	270	Aug 78	
f	Sec	114	97	16	11,058	Apr 62		c	Sec	50	19	3	950	Oct 64		107	Storage bldg	20	10	5	200	Apr 62	
g	Sec	26	13	12	336	Jul 72		d	Sec	19	7	8	133	Oct 64		108	Storage bldg	26	9	3	234	Jun 75	
h	Sec	164	144	9	23,616	Apr 62	4 stories	e	Sec	19	7	3	133	Oct 64		109	Shop	17	12	3	204	Aug 71	
i	Sec	167	11	14	7,348	Apr 62		56	Storage tank	15 (diam)	14					110	Shop				2,648		
j	Sec	24	15	8	360	Sep 76		57	Storage tank	16 (diam)	14					a	Sec	61	31	7	1,891	Jul 74	
k	Sec	9	7	12	63	Jul 74		58	Storage tank	13 (diam)	9					b	Sec	31	10	9	310	Sep 76	
l	Sec	69	12	15	828	Sep 72		59	Pump/valvehouse	13 (diam)	5					c	Sec	31	9	7	279	Oct 78	
m	Sec	92	69	16	6,348	Sep 72		60	Storage tank	5	5	10	25	Jul 74		d	Sec	14	12	7	188	Jun 80	
n	Sec	18	10	12	1,430	Jul 74		61	Pump/valvehouse	5	5	10	25	Jul 74		111	Support bldg	25	14	19	330	Oct 61	
23	Fab/assem bldg				12,362			62	Support bldg	32	12	4	384	May 81		112	Storage bldg	30	14	7	420	Sep 78	
a	Sec	42	32	8	1,344	Apr 62		63	Lab/workshop	28	16	7	416	Aug 71		113	Storage bldg	23	10	3	113	Aug 78	
b	Sec	9	6	4	48	Aug 75		64	Post test bldg	5	5	8	25	Nov 70		114	Test/checkout bldg	45	28	30	1,260	Apr 73	
b	Sec	10	6	9	60	Apr 62		65	Post test bldg	5	5	8	25	Nov 70		a	Sec	28	14	17	392	Apr 73	
c	Sec	143	70	11	10,010	Apr 62		66	Storage bldg	41	11	3	451	May 77		b	Sec	26	14	17	392	Apr 73	
d	Sec	143	10	12	1,430	Apr 62		67	Carpentry shop				1,406			c	Sec	14	6	4	84	May 77	
e	Sec	19	12	8	228		Ucon	a	Sec	10	4	4	40	Jul 72		115	Shop	41	14	4	574	Aug 75	
f	Sec	29	20		580		Ucon	b	Sec	34	12	4	408	Apr 62		116	Storage bldg		Irregular				
24	Shop				1,058	Jun 42	2 stories	c	Sec	34	12	4	408	Apr 62		117	Engr/test bldg	72	12	8	1,728		
a	Sec	34	6	12	408			d	Sec	22	13	5	288	May 77		a	Admin/engr sec	66	20	23	1,092		
b	Sec	36	18	15	648			e	Sec	22	12	5	254	May 77		b	Engr/test sec	42	26	23	1,092		
25	Storage bldg	35	11	3	385	Apr 62		68	Post test bldg	7	7	8	49	Aug 71		c	Engr/test sec	42	26	23	1,092		
26	Storage bldg	32	10	5	320	Apr 62		69	Storage bldg	25	14	3	350	Sep 76		118	Unid bldg	66	20	23	1,092		
27	Support bldg				244			70	Post test bldg	6	7	6	42	Aug 71		119	Support bldg	30	13	3	380	Jun 80	
a	Shop	19	10	7	190	Sep 76		71	Post test bldg	14	9	8	126	Aug 71		120	Support bldg	30	13	3	380	Jun 80	
b	Sec	9	6	3	54	Sep 63		72	Post test bldg	7	7	8	49	Aug 71		121	Support bldg	7	10	7	84	Jun 64	
28	Carpentry shop	48	28	6	1,344	Apr 62		73	Post test bldg	7	7	8	49	Aug 71		122	Storage tank	11 (diam)			5	Apr 68	
29	Shop	14	10	3	140	Aug 71		74	Post test bldg	7	7	8	49	Aug 71		123	Support bldg	8	6	4	54	Jun 64	
30	Shop	48	14	5	672	Sep 78		75	Post test bldg	7	7	8	49	Aug 71		124	Support bldg	30	13	3	390	Jul 78	
31	Storage bldg	191																					

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13. (S/D) Shipping crates associated with the RD-3M engine were observed at Ivankovskiy during the reporting period. The crates were east of a support building (item 120, Figure 2 and Table 1) in October 1978 and have been west of item 127 since June 1980. The presence of the crates in the new developmental area during its construction suggests that they may be for construction equipment or materials. Also, no propulsion test facilities have been available for engine testing during the reporting period. Modification of the engine/propulsion test facility began in 1978, but the facility is not yet operational. Neither the Bereznyak KB nor the Ivankovskiy plant have previously been associated with engine development. Historically, propulsion design authorities have developed engines and motors for missiles designed and produced by the Bereznyak KB. If the RD-3M crates were for engines under development, it is not likely that they would have remained in open storage, without any form of environmental protection, in the midst of a major construction program.

14. (TSZ) A 10-meter-long probable shipping container (Figure 7) was in the open storage yard on [redacted] Shipping containers of that size have not been associated with any of the missiles currently under development or in production at Ivankovskiy or other Bereznyak facilities. The 10-meter container could be for one of two new missile airframes: a strategic ALCM or the SS-NX-22 naval cruise missile, which is being tested at Chernomorskoye Missile and Test Evaluation Facility [redacted] During the flight test program conducted at Chernomorskoye, a [redacted] shipping container was observed with the missile airframe. The appearance of the 10-meter container in the open storage yard at Ivankovskiy coincided with the presence of two SS-NX-22 airframes at Chernomorskoye during late May and June 1981.³

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15. (TSRZU) Major components of a new ALCM (probably designed by the Bereznyak KB) have been under development for several years at the Vladimirovka Advanced Weapons and Research Complex (VAWARC). Initial flight testing of the new ALCM probably took place from November through December 1981. The 10-meter container at Ivankovskiy in May 1981 may have been for an early flight-test

Table 2.
ASM Shipping Containers Observed at Ivankovskiy
Guided Missile Plant and Transshipment Facility

This table in its entirety is classified SECRET/WNINTEL

Date	Main Plant		Transshipment Facility	
	AS-4	AS-9	AS-4	AS-9
	38	22	2	—
	—	—	2	—
	34	25	10	—
	—	—	6	—
	50	61	—	—
	67	65	—	—
	71	60	—	—
	25	—	—	—
	58	36	—	—
	46	40	—	—
	39	—	5	—
	40	45	7	—
	—	—	—	—
	—	—	—	—
	—	—	—	—
	28	23	2	—
	31	21	—	—
	—	—	—	—
	28	12	—	—
	19	12	10	—
	20	8	7	6
	44	11	9	9
	55	10	—	—
	—	—	—	—
	—	—	3	—
	6	2	4	—
	12	5	4	—
	6	2	10	—
	12	9	2	—
	7	16	2	—
	—	—	2	—
	10	21	2	—
	—	—	—	—
	9	14	—	—

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Table 3.
Unidentified Shipping Containers Observed at Ivankovskiy Guided Missile Plant

This table in its entirety is classified SECRET/WNINTEL

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Description	Dimensions (m)			Possible TASM Association
	L	W	H	
Crate				—
Canister				—
Crate				AS-7/AS-10/AS-X-12
Crate				AS-7/AS-10/AS-X-12
Crate				AS-14
Canister				AS-X-11
Crate				—

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version of the missile prior to its shipment to the VAWARC. Also, a new strategic bomber, the RAM-P, has been observed at Ramenskoye Flight Test Center [REDACTED] in the section of the flight test center associated with the Tupolev KB. The Bereznyak KB has been associated with the Tupolev, Zubets, and Yaskin KBs in the development of a Bereznyak-designed cruise missile.⁴ The shipping container at Ivankovskiy and the observation of a new large strategic bomber at Ramenskoye suggest that a new strategic ALCM could be near the flight-test phase of development.

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16. (S/D) Shipping containers (crates and canisters) dimensionally compatible with the airframes of the AS-7, AS-10, AS-X-11, AS-X-12, and AS-14 have been observed at Ivankovskiy (Table 3). The AS-7/-10/-X/-12 family of TASM ranges from [REDACTED] in length and [REDACTED] in diameter. A shipping canister has been associated with the [REDACTED] AS-X-11 airframe at operational TASM-equipped airfields. The AS-14 airframe is probably about [REDACTED] in diameter.

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REFERENCES

IMAGERY

(S/D) All relevant satellite imagery acquired from [REDACTED] the information cutoff date, was used in the preparation of this report.

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MAPS OR CHARTS

ACIC. US Air Target Chart, Series 200, Sheet 0154-22, scale 1:200,000 (UNCLASSIFIED)

DOCUMENTS

1. CIA/OSWR. [REDACTED] SW 80-10003J, *The Soviet SS-N-14 Antisubmarine Missile System (U)*, Mar 80 (TOP SECRET [REDACTED])
2. DIA. DST-1830s-289-78-SAO, [REDACTED] *Missile Industry Design and Development Resources - USSR (U)*, May 78 (TOP SECRET [REDACTED])
3. NPIC. [REDACTED], RCA-17/0002/81, *Developments at Chernomorskoye and Feodosiya Missile Test and Support Facilities (S)*, Dec 81, (TOP SECRET [REDACTED])
4. NPIC. [REDACTED], IAR-0075/80, *Soviet Probable Strategic Cruise Missile Development Programs (S)*, Sep 81 (TOP SECRET [REDACTED])

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***Extracted information is classified TOP SECRET [REDACTED]

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RELATED DOCUMENT

NPIC. [REDACTED], RCA-09/0036/78, *Ivankovskiy Guided Missile Plant (S)*, Nov 78 (TOP SECRET [REDACTED])

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REQUIREMENTS

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(S) Comments and queries regarding this report are welcome. They may be directed to [REDACTED] Soviet Strategic Forces Division, Imagery Exploitation Group, NPIC, [REDACTED]

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